proposal and evaluation of new therapies with the nephrologist; and estimation of therapies costs pre- and post-MR.
Results The identified ICT tool was the acknowledged platform NavFarma Suite, the same as used in two other regional projects with the purpose of creating a path between admission and discharge therapy. MR was conducted in 92 patients. The clinical pharmacist identified 265 DI, five classified as contraindicated and 260 as major, with a level of evidence equal to 52% excellent, 16% good and 32% discrete. 3.75% of therapies analysed were considered inappropriate. Cost analysis: the average cost of a single treatment for the patient was € 704 charged to the NHS and € 102 charged to the patient. The MR allowed a cost reduction of 4% for the NHS and of 37% for the patient.
Conclusion The project demonstrates that MR is one of the most appropriate methodologies to correct prescription errors, improve patient compliance and carry out a more effective model for pharmaceutical expenditure management. Technology and multidisciplinary summarises more suitable the innovation of the proposed model, in which a new figure, the clinical pharmacist, integrates the medical and nursing team by bringing his contribution in terms of pharmacological and pharmacokinetic knowledge and stimulates the critical evaluation of the therapeutic choices and of the data processed through the use of an accurate ICT tool.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-156 SAFETY PROFILE OF APREMILAST IN PSORIASIS AND PSORIATIC ARTHRITIS

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Background Apremilast is an oral selective inhibitor of phosphodiesterase-4 with active psoriatic arthritis (PsA) and moderate to severe psoriasis (Ps). Apremilast is on the European list of medicinal products under additional monitoring.
Purpose To assess the safety profile of apremilast and identify patient risk factors associated with the appearance of side effects (ASE).
Material and methods A descriptive, retrospective study was carried out in patients with Ps and PsA who initiated apremilast between 2016–2018. Data were collected from clinical history and the pharmacy program (Farmatools).

Data analysed: demographic characteristics, diagnosis, previous treatment, ASE, dose reductions, reason for drug discontinuation and duration of treatment in those patients who discontinued apremilast.

The relationship between factors related to the patient and the ASE was evaluated using SPSS15.0.
Results Fifty patients were analysed, median age 55.1 years (IQR: 45.5–61.8), 52% females. Sixty-six per cent were diagnosed with Ps, 32% with PsA and 2% were on off-label use.

The median of previous treatments received was 2 (IQR: 1–3). All patients had previously been treated with, at least, one conventional systemic therapy: methotrexate 86%, acitretin 46%, cyclosporine 26% and others 20%; and 24% had also been treated with biologic agents: adalimumab 58%, etanercept 50% and others 42%.

Side effects (SE) were observed in 78% of patients (median of SE: 1 (IQR: 1–3)). Most frequent were: diarrhoea 72%, headache 42%, nausea and vomiting 36%, acid reflux 32%, decreased appetite 18%, abdominal pain 18% and depression 12%. Dosage reductions of 50% were observed in 14% of patients.

Medium duration until ASE was 1.3 (IQR: 0–9.5) months.

Half of the patients discontinued apremilast, 48% due to inefficacy, 36% SE, 12% both and 2% patients' request.

There were not statistically significant differences in ASE in terms of sex ($p=0.167$) or diagnosis ($p=0.062$). However, significant differences were found according to age ($p=0.044$).
Conclusion A high percentage of patients presented SE to apremilast, with diarrhoea the most frequent.

Patients' demographic characteristics and diagnosis were not related to the ASE, apart from age.

For future research, it would be interesting to determine the effect of age on the ASE and to evaluate the tolerance and the effectiveness of reduced doses of apremilast in these type of patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-157 TUMOUR NECROSIS FACTOR INHIBITORS: UTILITY OF PHARMACOKINETICS MONITORING IN INFLAMMATORY BOWEL DISEASE MANAGEMENT

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Background Infliximab (IFX) and adalimumab (ADA) are two monoclonal antibodies (inhibitors of tumour necrosis factor alpha (anti-TNF)) that have revolutionised the management of patients with inflammatory bowel disease (IBD). However, there is a high rate of patients who show no initial clinical benefit for anti-TNF therapy or who lose the response over time. This fact, besides the high cost of these drugs, makes it necessary for an adequate individualisation of the therapy in order to optimize it.
Purpose To describe the pharmacokinetic determinations of serum levels of IFX and ADA in patients with IBD and to evaluate its impact on clinical decision-making.
Material and methods Retrospective, cross-sectional study, carried out in a general hospital. We analysed all anti-TNF determinations (ADA and IFX) performed during 1 year (2017) in patients with IBD. After the analytical determination, the pharmacy service performed a pharmacokinetic study (Bayesian adjustment) and recommended a new posology to the digestive specialist. Anthropometric data of the patients, diagnosis, reason for the request for monitoring, analytical result, pharmacokinetic recommendation and acceptance of this by the physician were collected.
Results A total of 71 determinations were obtained corresponding to 49 participants (60.2% males; 45.6±15.4 age; 63.3% Crohn's disease and 36,7% ulcerative colitis; 57% treated with ADA). The main reason for monitoring was the presence of activity of the disease (65% ADA; 64% IFX), followed by periodic control (35% ADA; 32% IFX) and other reasons. The drug levels obtained in the monitoring were 5.0 ±4.0 mcg/mL (0.1–12.3) for ADA and 6.4±3.9 mcg/mL (1–18.5) for IFX. A large number of patients presented serum levels outside the target range (63% ADA and 32% IFX underdosed, 2% ADA and 46% IFX overdosed).

The main recommendation was the maintenance of the regimen and the intensification of the dose. The gastroenterologist acted following the suggestion of the pharmacist in more than 80% of the cases.

Conclusion Results obtained show a high percentage of patients with inadequate anti-TNF serum levels and support the use of anti-TNF pharmacokinetic monitoring as a useful tool in clinical decision-making.

REFERENCES AND/OR ACKNOWLEDGEMENTS

To my workmates, thank you.

No conflict of interest.

4CPS-158 CLINICAL BENEFIT OF INFLIXIMAB MONITORING IN INFLAMMATORY BOWEL DISEASE

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Background The adjustment of infliximab (IFX) doses is commonly based on subjective data or invasive methods. However, pharmacokinetic monitoring of IFX plasma levels is a currently available tool that has proved to be useful in the optimisation of clinical results.[1]

Purpose To analyse the clinical course of acute-phase reactants in patients with inflammatory bowel disease (IBD) treated with IFX, and to evaluate if there is a clinical benefit resulting from applying the pharmacokinetic recommendations in the management of these patients.

Material and methods Retrospective, cross-sectional study carried out in a general hospital. All the determinations of IFX performed during 2017 in patients with IBD were analysed. After analytical determination, the pharmacy service performed a pharmacokinetic study (Bayesian statistics) and recommended a new dosage to the digestive specialist. Identification data of the patients and analytical results (fecal calprotectin and C-reactive protein (CRP)) measured before the monitoring (pre) and 3 months later (post) were collected. In addition, it was evaluated if the digestive specialist followed the pharmacokinetic recommendation (acceptance/rejection).

Results During the study period, the IFX serum levels of 21 patients with IBD were determined. The mean level of fecal calprotectin measured before the extraction of IFX blood levels was 1,257.2 mg/kg and this was reduced to 503.2 mg/kg at 3 months after monitoring (p=0.053). As for CRP, a decrease was also observed, with a CRP value of 7.1 mg/L before monitoring and a CRP value of 3.8 mg/L after 3 months (p=0.035). These data were analysed again, stratifying according to the degree of acceptance of the pharmacist's recommendations for clinical decision-making (table 1).

Abstract 4CPS-158 Table 1 Acute-phase reactants (pre- and post-monitoring) segmented by the acceptance of the pharmacist's intervention

	Fecal calprotectin (mg/Kg)	CRP (mg/L)
	Xpre–Xpost monitoring (P-value)	Xpre–Xpost monitoring (P-value)
ACCEPTED	1.163–475 (0.044*)	7.4–3.8 (0.021*)
REJECTED	1.295–727 (0.655)	4.6–3.8 (0.715)

X=average; P-value (Wilcoxon test)

Conclusion Both PCR and calprotectin were reduced after 3 months of IFX monitoring. The clinical improvement observed was greater in the group of patients in whom the dose drug was adjusted following the recommendation of the pharmacist. These results support the role of therapeutic IFX monitoring in the optimisation of IBD treatment, according to the evidence published by other authors.

REFERENCE AND/OR ACKNOWLEDGEMENTS

1. Kelly OB, Donnell SO, Stempak JM, *et al*. Therapeutic drug monitoring to guide infliximab dose adjustment is associated with better endoscopic outcomes than clinical decision making alone in active inflammatory bowel disease. *Inflamm Bowel Dis* 2017;**23**:1202–9.

No conflict of interest.

4CPS-159 PERIOPERATIVE MANAGEMENT OF ANTIRHEUMATIC MEDICATION IN REAL PRACTICE: IS MISMANAGEMENT RELATED TO POST-SURGICAL COMPLICATIONS?

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Background A perioperative management of antirheumatic drug therapy guidelines was published by the American College of Rheumatology in 2017. The optimal perioperative management of inmunosuppressant therapy may present an opportunity to mitigate post-surgery infection risk versus disease flare risk if the medication is withheld.

Purpose To evaluate the accuracy between the real practice in perioperative management of patients with rheumatic diseases and the guideline recommendations, and to assess post-surgery complications and identify associated risk factors.

Material and methods Retrospective, observational study. Adult patients with rheumatoid arthritis (RA), spondyloarthritis (SpA) and psoriatic arthritis (PsA) in treatment with biologic agents while undergoing surgery between January 2017 and August 2018 were included.

Data collected:

- Diagnosis, anthirreumatic treatment (biologic agent, disease-modifying antirheumatic drugs (DMARDs) and glucocorticoids) and doses.
- Continuation/interruption of DMARDs and biologic agent, time of reintroducing them and glucocorticoid adjustment dose during surgery.
- Post-surgery complications: infections and disease flares.

Descriptive statistics and binary logistic regression were performed with SPSS 20.0.

Results Forty-seven patients were included: 63.,8% RA, 19.1% SpA and 17.1% PsA. Anti-TNFα agents were used in 76.5% patients, from which 14% of patients required an intensified dose. DMARDs were combined with biologic therapy in 63.8%, while glucocorticoids were used in 44.7%.

During perioperatory time and according to guidelines, a total of 93.3% continued with DMARDs and 95.2% with glucocorticoids when the daily dose of prednisone or equivalent was <20 mg. Nevertheless, 14.8% interrupted the biologic agent, from which 42.8% of the surgeries were scheduled at the end of the biological therapy cycle and no patient was properly reintroduced to a biologic agent after 14 days from surgery.